## **Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

## **Listing of Claims:**

Claim 1 (currently amended): A method of optical imaging of lung cancer of an animate subject involving administering a contrast agent to said subject and generating an optical image of at least a part of the subject to which said contrast agent has distributed, wherein said contrast agent has a molecular weight below 14,000 Daltons, and is of formula I:

$$V-L-R$$
, (I)

wherein

V is one or more vector moieties having affinity for an abnormally expressed target in lung cancer, said target is HER2/epidermal growth factor receptor (EGFR);

L is a linker moiety or a bond; and

R is one or more reporter moieties detectable in optical imaging, wherein the reporter characteristics do not change upon binding of said contrast agent to said target.

Appl. No. 10/582,893

Amdt. Dated October 12, 2011

Reply to Office Action of June 15, 2011

Claims 2-6 (cancelled)

Claim 7 (previously presented): The method as claimed in claim 1 wherein R is a dye that

interacts with light in the wavelength region from the ultraviolet to the near-infrared part of

the electromagnetic spectrum.

Claim 8 (previously presented): The method of claim 1, where the contrast agent is

administered as a pharmaceutical composition, said composition comprising a contrast agent

as defined in claim 1 together with at least one pharmaceutically acceptable carrier or

excipient.

Claims 9-10 (cancelled)

Claim 11 (previously presented): The method as claimed in claim 1 wherein the optical

imaging is for the diagnosis of lung cancer, for the follow up of the progress of lung cancer

development, for the follow up of treatment of lung cancer or for surgical guidance.

Claims 12-13 (cancelled)

Page 3 of 5